

CLAIMS

1. A scan subsystem document processing method, the method comprising:

5 at a document processing application, accepting graphics device interface (GDI) data; and,
converting the GDI data into an internal representation (IR) data format proprietary to the document processing application.

2. The method of claim 1 further comprising:
10 parsing the IR data into a standard language document format specified for use with the document processing application; and,
saving the standard language document in storage memory.

3. The method of claim 1 further comprising:
15 supplying the IR data to a user interface (UI) display;
accepting user commands at the UI; and,
manipulating the IR data in response to the user commands.

4. The method of claim 1 wherein accepting GDI data at
20 a document processing application includes accepting the GDI data at a document processing application selected from the group including text, vector, and graphics applications.

5. The method of claim 1 further comprising:
25 at a scan subsystem, accepting scan data;

converting the scan data into device dependent interface
(DDI) data; and,
converting the DDI data to GDI data.

5 6. The method of claim 5 wherein accepting scan data
includes accepting proprietary formatted scan data;

 wherein converting the scan data into DDI data includes
converting the proprietary scan data to an operating system (OS) specific
DDI data format; and,

10 wherein converting the DDI data to GDI data includes
converting the OS specific DDI data to a standard GDI data format.

 7. The method of claim 5 wherein accepting scan data
includes accepting scan data from a device selected from the group
15 including a scanning device, facsimile device, electronic whiteboard, tablet
personal computer, and a storage device.

 8. The method of claim 5 wherein converting scan data to
DDI data includes converting journaled scan data.

20

 9. The method of claim 8 wherein converting journaled
scan data includes:

 despooling the scan data;

 converting the scan data to DDI data;

25 respooling the DDI data; and,

wherein converting the DDI data to GDI data includes
subsequently despooling the DDI for conversion into GDI data.

10. The method of claim 1 further comprising:
5 converting IR data into GDI data;
at a print subsystem, converting the GDI data into DDI data;
converting the DDI data into printer-ready data.

11. A system for converting graphics device interface
10 (GDI) data into document processing application data, the system
comprising:
a document processing application including:
an internal representation (IR) compiler having
an interface to accept GDI data and an interface to supply the GDI
15 data converted into an IR data format proprietary to the document
processing application.

12. The system of claim 11 wherein the document
processing application further includes:
20 a parser having an interface to accept the IR data and an
interface to supply a standard language document format specified for use
with the document processing application.

13. The system of claim 12 further comprising:

a user interface (UI) including a display to display the IR data, an interface to accept user commands, and an interface to supply the accepted user commands; and,

wherein the document processing application further
5 includes:

an editor having an interface to accept the IR data, an interface to supply the IR data to the UI, an interface accept the user commands, and an interface to supply IR data manipulated in response to the user commands.

10

14. The system of claim 11 wherein the document processing application is selected from the group including text, vector, and graphics applications.

15

15. The system of claim 11 further comprising:
a scan subsystem including:

a scan driver having an interface to accept scan data and an interface to supply scan data converted into device dependent interface (DDI) data; and,

20

a GDI compiler having an interface to accept DDI data and an interface connected to the document processing application to supply DDI data converted into GDI data.

16. The system of claim 15 wherein the scan driver accepts
25 proprietary formatted scan data and converts the proprietary scan data to an operating system (OS) specific DDI data format; and,

wherein the GDI compiler converts OS specific DDI data to a standard GDI data format.

17. The system of claim 15 further comprising:

5 a device, selected from the group including a scanning device, facsimile device, electronic whiteboard, tablet personal computer, and a storage device, having an interface to supply scan data to the scan driver.

18. The system of claim 15 wherein the scan subsystem
10 further includes:

a scan processor for performing preprocessing operations on scan data, having an interface to accept scan data, and an interface to supply the scan data, the scan data being selected from the class including rendered and journaled scan data; and,

15 a spooler having an interface to accept scan data from the scan processor and an interface to supply scan data to the scan driver.

19. The system of claim 18 wherein the scan driver
converts scan data to DDI data, and sends the DDI data to the scan
20 processor;

wherein the scan processor sends the DDI data to the spooler for respooling; and,

wherein the scan driver subsequently despools the DDI data for conversion into GDI data.

25

20. The system of claim 11 wherein the IR compiler has an interface accept IR data from the parser and an interface to supply IR data converted into GDI data;

the system further comprising:

5 a print subsystem including:

a GDI compiler having an interface to accept GDI data from the IR compiler and an interface to supply GDI data converted to DDI data; and,

10 a print driver having an interface to accept the DDI data and an interface to supply printer-ready data.

21. The system of claim 12 further comprising:

15 a memory having an interface to accept the standard language document for persistent storage.